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| * * * | * * | * * | * * | * Welcome to STN International * * * * * * * * * |
| NEWS | 1 | | | Web Page for STN Seminar Schedule - N. America |
| NEWS | | | | STN pricing information for 2008 now available |
| NEWS | 3 | JAN | 16 | CAS patent coverage enhanced to include exemplified |
| | | | | prophetic substances |
| NEWS | 4 | JAN | 28 | USPATFULL, USPAT2, and USPATOLD enhanced with new |
| | | | | custom IPC display formats |
| NEWS | | JAN | | MARPAT searching enhanced |
| NEWS | 6 | JAN | 28 | USGENE now provides USPTO sequence data within 3 days |
| | _ | | | of publication |
| NEWS | | JAN | | TOXCENTER enhanced with reloaded MEDLINE segment |
| NEWS | 8 | | | MEDLINE and LMEDLINE reloaded with enhancements |
| NEWS | | | | STN Express, Version 8.3, now available |
| | 10 | | | PCI now available as a replacement to DPCI |
| | 11 | | | IFIREF reloaded with enhancements |
| | 12 | | | IMSPRODUCT reloaded with enhancements |
| NEWS | 13 | FEB | 29 | WPINDEX/WPIDS/WPIX enhanced with ECLA and current |
| | | | ~ ~ | U.S. National Patent Classification |
| NEWS | 14 | MAR | 31 | IFICDB, IFIPAT, and IFIUDB enhanced with new custom |
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| NEWS | 15 | MAR | 31 | CAS REGISTRY enhanced with additional experimental |
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| NEWS | 17 | MAR | 21 | LPCI now available as a replacement to LDPCI |
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| | 19 | | | STN AnaVist, Version 1, to be discontinued |
| NEWS | | APR | | WPIDS, WPINDEX, and WPIX enhanced with new |
| MEMO | 20 . | PIL IX | 10 | predefined hit display formats |
| NEWS | 21 | APR | 20 | EMBASE Controlled Term thesaurus enhanced |
| NEWS | | APR | | IMSRESEARCH reloaded with enhancements |
| NEWS | | MAY | | INPAFAMDB now available on STN for patent family |
| MEMO | 25 | LIMI | 50 | searching |
| NEWS | 24 | MAY | 3.0 | DGENE, PCTGEN, and USGENE enhanced with new homology |
| MEMO | 24 . | LIPLI | 50 | sequence search option |
| MEMS | 25 | TIIN | 06 | EPFULL enhanced with 260,000 English abstracts |
| | 26 | | | KOREAPAT updated with 41,000 documents |
| NEWS | | JUN | | USPATFULL and USPAT2 updated with 11-character |
| MEMO | 2, | 0 014 | 13 | patent numbers for U.S. applications |
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| NEWS | EXPR | ESS | FEB | RUARY 08 CURRENT WINDOWS VERSION IS V8.3, |
| | | | | CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008 |
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10 11 12 13 14 15 16 17 18 19 20 21 22 23 25 26 ring nodes:
1 2 3 4 5 6 7 8 9 chain bonds:
1 -19 2-10 3-20 4-22 9-18 10-11 11-12 12-13 12-23 13-14 14-15 15-16 15-17 16-25 19-26 20-21 ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-9 7-8 8-9 exact/norm bonds:
1-19 3-20 5-7 6-9 7-8 8-9 9-18 15-16 15-17 16-25 19-26 exact bonds:
2-10 4-22 10-11 11-12 12-13 12-23 13-14 14-15 20-21 normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6
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G1:H,Na

chain nodes :

Match level: 1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:CLASS 11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 25:CLASS 26:CLASS

L1 STRUCTURE UPLOADED

=> d 11 L1 HAS NO ANSWERS L1 STR

G1 H, Na

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss full FULL SEARCH INITIATED 18:38:10 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1058 TO ITERATE

100.0% PROCESSED 1058 ITERATIONS SEARCH TIME: 00.00.01 33 ANSWERS

L2 33 SEA SSS FUL L1

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 178.36

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 178.77
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http://www.cas.org/legal/infopolicy.html

=> s 12 L3 1728 L2

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=> s 13 and crystalline
         83070 CRYSTALLINE
           270 CRYSTALLINES
         83318 CRYSTALLINE
                (CRYSTALLINE OR CRYSTALLINES)
        372730 CRYST
          1802 CRYSTS
        373999 CRYST
                 (CRYST OR CRYSTS)
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                (CRYSTALLINE OR CRYST)
L4
            12 L3 AND CRYSTALLINE
=> s 14 and oscillation
         68380 OSCILLATION
         73511 OSCILLATIONS
        116683 OSCILLATION
                (OSCILLATION OR OSCILLATIONS)
L5
             0 L4 AND OSCILLATION
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         17585 HABIT
          8408 HABITS
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1.6
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L4
   ANSWER 1 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
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GI

$$-$$
W' $-$ Z $-$ W-Y $-$ Z $-$ R3 $-$ 1I $-$ R1 $-$ V-R2 $-$ 1II

AB The invention relates to synthetic peptide amide ligands of the kappa opioid receptor XaalXaa2Xaa3(Xaa4)a-G [I; Xaal-Xaa3 = substituted D-amino acids; $Xaa4 = D-amino acids, cis- and trans-<math>\alpha$, 4diaminocyclohexaneacetic acid, cis- and trans-α-amino-4quanidinocyclohexaneacetic acid, etc.; G = (Xaa1)m(Xaa2)n(Xaa3)p(Xaa4)qL; m-p = independently 0-1; q, a = independently 0-1, provided that at least one of q and a = 1; L = linker selected from ε -D-Lys, ε-Lys, δ-D-Orn, δ-Orn, γ-aminobutyric acid, 8-aminooctanoic acid, 11-aminoundecanoic acid, 8-amino-3,6-dioxaoctanoic acid, 4-amino-4-piperidinecarboxylic acid, (D-LysGly lactam)2; or G = II; J = 5-7 membered heterocyclyl containing 1-3 heteroatoms in the ring; R3, R4 = independently alkyl, halo, OH, CF3, NH2, CO2H, amidino; R5, R6 = independently oxo, R3; W' = absent, provided that when W' = absent, Y = N; or W' = NH(CH2)b; b = 0-6 or W' = NH(CH2)cO; c = 2-3], their stereoisomers, mixture of stereoisomers, prodrugs, pharmaceutically acceptable salts, hydrates, solvates, acid salt hydrates, N-oxides or isomorphic crystalline forms and particularly to agonists of the kappa opioid receptor that exhibit low P450 CYP inhibition and low penetration into the brain for treatment of pain and inflammation associated with a variety of diseases and conditions. The invention also relates to synthetic peptide amide in which G = II; when G = II, a = 1, Xaa3-Xaa4- = D-Nle-(B)2D-Arg-, D-Leu- δ -(B)2 α -(B')D-Orn-, $(\alpha-Me)D-Leu-\delta(B)2-\alpha(B')D-Orn-$, and Y, Z = independently C, or N which are not adjacent ring atoms, provided that when such ring moiety is 6-8 membered ring, Y and Z are separated by at least 2 ring atoms and provided that when such ring moiety has a single ring heteroatom which is N, then such ring moiety is nonarom.; W = one of W'; V = V'e; V' = alkyl and e = 0-1; when e = 0, V = absent and R1 and R2 are directly bonded to the same or different ring atoms; R1 = H, OH, halo, amidino, Pro-amide, alkyl, Lys, Arg, etc.; R2 = H, amidino, singly or doubly alkyl substituted amidino, CN, CONH2 and derivs., etc.; R1 and R2 taken together can form an optionally substituted 4-9 membered monocyclyl or bicyclyl heterocyclyl which is bonded to a single ring atom of the Y and Z-containing ring moiety; or R1 and R2 taken together with a single ring atom of the Y and Z-containing ring moiety can form an optionally substituted 4-8 membered heterocyclic ring moiety to form a spiro structure; or R1 and R2 taken together with two or more adjacent ring atoms of the Y and Z-containing ring

moiety can form an optionally substituted 4-9 membered heterocyclic monocyclic or bicyclic ring moiety fused to the Y and Z-containing ring moiety. Furthermore, when G = III, 12 = 4-8 membered heterocyclic ring, wherein Y = C or N and Z = C, N, O, S, SO, SO2, provided that when such ring moiety is 6-8 membered ring, Y and Z are separated by at least 2 ring atoms and provided that when such ring is nonarom. and Z = C or N then such ring moiety contains at least one S or O heteroatom, and provided further that when such ring is aromatic, then Y = C. Eleven biol. examples are given. Thus, peptide amide IV was prepared on Z-chlorotrityl chloride resin using Boc-D-Phe-OH, Fmoc-D-Phe-OH, Fmoc-D-Leu-OH, Fmoc-D-Phe-OH, and 2-carboxy-4-[[(fluoren-9-

yl)methoxy]carbonyl]morpholine. The potency of the peptide amides I as kappa opioid receptor agonists was determined by measuring the inhibition of forskolin-stimulated adenylate cyclase activity in mouse R1.G1 cells; EC50 = 0.178 nM and efficacy = 100% for TV. I and their pharmaceutical compns. are useful for treating visceral pain, neuropathic pain, hyperalgesia and inflammation associated with conditions such as IBD and IBS, ocular and otic inflammation, other disorders and conditions such as pruritis, edema,

hyponatremia, hypokalemia, ileus, tussis and glaucoma.

ACCESSION NUMBER: 2008:619334 CAPLUS

TITLE: Synthetic peptide amides and dimers as kappa opioid

receptor agonists for treatment of pain and

inflammation

> Zhiyong Cara Therapeutics, Inc., USA

PATENT ASSIGNEE(S): Cara Therapeutics, Inc SOURCE: PCT Int. Appl., 158pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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| PAT | ENT : | NO. | | | KIN | D | DATE | | | | | | . OV | | D. | ATE | |
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| WO | 2008 | 0605 | 52 | | A2 | _ | | | | | | | | | 2 | 0071 | 113 |
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| | RW: | IS, | IT, | LT, | LU, | LV, | MC, GA, | MT, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | |
| | | BY, | KG, | KZ, | | | MZ, TJ, | | | | | | · | · | | | |
| PRIORITY | APP | LN. | INFO | . : | | | | | | US 2 | 006- | 8581 | 20P 21P | Ī | P 2 | 0061 0061 | 110 |
| | | | | | | | | | | US 2 | 007- | 9285 | 23P 27P 51P | 1 | P 2 | 0061 0070 | 510 |
| TT 242 | 9.0.9 | 31D | Maza | conh | anol | ic a | cid | der | | US 2 | 007- | 9285 | 57P | 1 | P 2 | 0070 | |

IT 24280-93-1D, Mycophenolic acid, derivs. and heterocylic aminoalkyl esters

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthetic peptide amide ligands of $\kappa\text{-opioid}$ receptors useful in prophylaxis, treatment and combination therapy of pain and inflammation

associated with variety of diseases)

RN 24280-93-1 CAPLUS

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

Double bond geometry as shown.

L4 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN GT

AB The invention relates to synthetic peptide amide ligands of the kappa opioid receptor I [Xaa1-Xaa3 = substituted D-amino acids; Xaa4 = D-amino acids, cis- and trans-α,4-diaminocyclohexaneacetic acid, cis- and $trans-\alpha-amino-4-quanidinocyclohexaneacetic acid; W = absent.$ provided that when W = absent, Y = N; or W = NH(CH2)m; m = 0-6 or W = NH(CH2)mNH(CH2)pO; p = 2-3, provided that Y= C; YZ = 4-8 membered heterocyclic ring, wherein all ring heteroatoms are N; Y, Z = independently C, N, provided that when such ring moiety is 6-8 membered ring, Y and Z are separated by at least 2 ring atoms and provided that when such ring moiety has a single ring heteroatom which is N, then such ring moiety is nonarom.], their stereoisomers, mixture of stereoisomers, prodrugs, pharmaceutically acceptable salts, hydrates, solvates, acid salt hydrates, N-oxides or isomorphic crystalline forms and particularly to agonists of the kappa opioid receptor that exhibit low P450 CYP inhibition and low penetration into the brain for treatment of pain and inflammation associated with a variety of diseases and conditions. Sixteen biol. examples are given. Thus, peptide amide II was prepared on p-nitrophenylcarbonate Wang resin using Cbz-D-Phe-OH, Fmoc-D-Phe-OH, Fmoc-D-Leu-OH, Fmoc-Lys(Dde)-OH

ΙI

[Dde = 1-(4,4-dimethyl-2,6-dioxocyclohex-1-ylidene)ethyl] and homopiperazine. The potency of the peptide amides I as kappa opioid receptor agonists was determined by measuring the inhibition of forskolin-stimulated adenylate cyclase activity; EC50 = 0.043 nM and efficacy = 103% for II. I and their pharmaceutical compns. are useful for treating visceral pain, neuropathic pain, hyperalgesia and inflammation associated with conditions such as IBD and IBS, ocular and otic inflammation, other disorders and conditions such as pruritis, edema, hyponatremia, hypokalemia, ileus, tussis and glaucoma.

ACCESSION NUMBER: 2008:585809 CAPLUS

DOCUMENT NUMBER: 148:562184

TITLE: Synthetic peptide amides as kappa opioid receptor agonists for treatment of pain and inflammation

Schteingart, Claudio D.; Menzaghi, Frederique; Jiang, INVENTOR(S): Guangcheng; Alexander, Roberta Vezza; Sueiras-Diaz, Javier; Spencer, Robert H.; Chalmers, Derek T.; Luo,

Zhiyong

Cara Therapeutics, Inc., USA PATENT ASSIGNEE(S): PCT Int. Appl., 132pp., which SOURCE: CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PAT | ENT : | NO. | | | KIND DATE | | | APPLICATION NO. | | | | | | DATE | | | |
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| WO | 2008 | 0576 | 08 | | A2 | | 2008 | 0515 | | WO 2 | 007-1 | US23 | 858 | | 2 | 0071 | 113 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | ΑZ, | BA, | BB, | BG, | BH, | BR, | BW, | BY, | ΒZ, | CA, |
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| PRIORITY | APP | LN. | INFO | . : | | | | | | US 2 | 006- | 8581 | 09P | 1 | P 2 | 0061 | 110 |

US 2007-928550P P 20070510 24280-93-1D, Mycophenolic acid, derivs. and heterocylic aminoalkyl esters

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(synthetic peptide amide ligands of κ-opioid receptors useful in prophylaxis and treatment and combination therapy of pain and inflammation associated with variety of diseases)

RN 24280-93-1 CAPLUS

4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5-CN isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

L4 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN GI

Ι

AR Methods for modulating the level of a chemokine in a cell by administering to a cell an effective amount of a depside or an anthocyanin are provided. More particularly, a method for modulating the level of a chemokine in a cell by administering to a cell an effective amount of a depside having the structure of formula I: wherein R is selected from H or CH3 or an anthocyanin selected from cyanidin 3-glucoside, delphinidin 3-glucoside, or combinations thereof, or an enantiomer, optical isomer, diastereomer, N-oxide, crystalline form, hydrate, or pharmaceutically acceptable salt thereof is provided. Also provided are depside and anthocyanin compds., pharmaceutical compns., unit dosage forms, and food or feed supplements containing such compds. Methods for treating a condition in a mammal and for treating or ameliorating a condition, such as for example, chronic obstructive pulmonary disease (COPD) by administering an effective amount of a composition containing such compds. are also provided. Further provided

is an extract obtained from the fruit of Myrciaria cauliflora containing at

one compound of the present invention in substantially pure form.

ACCESSION NUMBER: 2008:160479 CAPLUS DOCUMENT NUMBER: 148:206676

TITLE: Bioactive depside and anthocyanin compounds, compositions, and methods of use

INVENTOR(S): D'Armiento, Jeanine; Reynertson, Kurt; Kennelly,

Edward; Wallace, Alison
PATENT ASSIGNEE(S): Trustees of Columbia University In the City of New

York, USA

SOURCE: PCT Int. Appl., 63pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| | | | KIND DATE | | | | | | | | | | | | |
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| PRIORITY APP | LN. INFO | US 2006-834719P | | | | | | 1 | P 2 | 0060 | 731 | | | | |
| OTHER SOURCE | (S): | | MAR | PAT | 148: | 2066 | 76 | | | | | | | | |
| TT 24280-9 | TT 24280-93-1 Mycophenolic acid | | | | | | | | | | | | | | |

OTHE IT

24280-93-1, Mycophenolic acid RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(bioactive depside and anthocyanin compds. for modulation of chemokines and treatment of disease in relation to isolation from Myrciaria

cauliflora and treatment with other agents) RN 24280-93-1 CAPLUS

CN

4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

Double bond geometry as shown.

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN L4 GI

AB The present invention relates to erastin analogs, particularly compols. of formula I. The invention also relates to pharmaceutical compns. containing such analogs and to methods of treating a condition in a mammal with such analogs and compns. Compds. of formula I wherein RI is H, Cl-8 alkyl, Cl-8 alkoxy, 3 - to 8-membered carboxylic, and 3 - to 8-membered heterocyclic, (hetero)aryl, etc.; R2, R3, R4, R5 and R6 are independently H, halo, Cl-4 alkyl(amino), acyl, and alkylsulfonyl; and their enantiomers, optical isomers, diastereoisomers, N-oxides, crystalline forms, hydrates and pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by a multistep procedure (procedure given). All the invention compds. were evaluated for their anticancer activity.

ACCESSION NUMBER: DOCUMENT NUMBER: 2007:763864 CAPLUS 147:166336

TITLE:

Erastin analogs and their preparation, pharmaceutical compositions and use in the treatment of cancer and other conditions characterized by hyperproliferation of cells

INVENTOR(S): Stockwell, Brent R.
PATENT ASSIGNEE(S): USA

PATENT ASSIGNEE(S): SOURCE:

U.S. Pat. Appl. Publ., 174pp., Cont.-in-part of Appl.

No. PCT/US2006/002723. CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | | KIND | DATE | APPL | ICATION | NO. | DATE | |
|--------------|---------|--------|-----------|---------|----------|---------|---------|-----|
| | | | | | | | | |
| US 200701616 | 644 | A1 | 20070712 | US 2 | 006-4925 | 46 | 20060 | 724 |
| WO 200608133 | 37 | A2 | 20060803 | WO 2 | 006-US27 | 23 | 20060 | 125 |
| WO 200608133 | 37 | A3 | 20070215 | | | | | |
| W: AE, | AG, AL, | AM, AT | , AU, AZ, | BA, BB, | BG, BR, | BW, BY, | BZ, CA, | CH, |
| CN, | CO, CR, | CU, CZ | , DE, DK, | DM, DZ, | EC, EE, | EG, ES, | FI, GB, | GD, |
| GE, | GH, GM, | HR, HU | , ID, IL, | IN, IS, | JP, KE, | KG, KM, | KN, KP, | KR, |
| KZ, | LC, LK, | LR, LS | , LT, LU, | LV, LY, | MA, MD, | MG, MK, | MN, MW, | MX, |

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MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
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             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
     WO 2008013840
                                           WO 2007-US16702
                          A2
                                20080131
                                                                   20070724
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             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
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             IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO .:
                                            US 2005-647372P
                                                                 P 20050125
                                                                A2 20060125
                                            WO 2006-US2723
                                            US 2006-762221P
                                                                   20060124
                                            US 2006-492546
                                                                A 20060724
OTHER SOURCE(S):
                         MARPAT 147:166336
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24280-93-1 TT

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(codrug; preparation of erastin analogs and uses for treating cancer or other conditions characterized by hyperproliferation of cells)

24280-93-1 CAPLUS RN

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

Double bond geometry as shown.

ANSWER 5 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN L4

AB A method for depositing a coating comprising a polymer and pharmaceutical agent on a substrate, comprising the following steps: discharging at least one pharmaceutical agent in a therapeutically desirable morphol. in dry powder form through a first orifice; discharging at least one polymer in dry powder form through a second orifice; depositing the polymer and/or pharmaceutical particles onto said substrate, wherein an elec. potential is maintained between the substrate and the pharmaceutical and/or polymer particles, thereby forming said coating; and sintering said coating under conditions that do not substantially modify the morphol. of said pharmaceutical agent. Dry powder rapamycin was coated on an elec. charged 316 stainless steel metal coupon by the above method. The coupon was covered in a relatively even distribution of powdered material. X-ray

diffraction confirmed that the powdered material was largely crystalline

in nature as deposited on the metal coupon.

ACCESSION NUMBER: 2007:83515 CAPLUS
DOCUMENT NUMBER: 146:190619

TITLE: Polymer coatings containing drug powder of controlled

morphology

INVENTOR(S): Taylor, Doug; McClain, Jim; Smoke, Clint; Cole, Mike;

Deyoung, James

PATENT ASSIGNEE(S): Micell Technologies, Inc., USA

SOURCE: PCT Int. Appl., 107pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3 PATENT INFORMATION:

| | | ENT 1 | | | | | | DATE | | | | | | | | | ATE | |
|-------|------|-------|------|------|------|------|------|--------------|------|------|------|------|------|-------|---------|------|---------|-----|
| 1 | WO 2 | 20070 | 0117 | 07 | | A2 | | 2007 2007 | 0125 | | | | | | | | | |
| | | W: | | | | | | AU, | | | | | | | | | | |
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| | | | | | | | | ZM, | | | | | | | | | | |
| | | RW: | | | | | | CZ, | | | | | | | | | | |
| | | | | | | | | MC, | | | | | | | | | | |
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| | | | KG, | ΚZ, | MD, | RU, | ТJ, | TM, | ΑP, | EA, | EP, | OA | | | | | | |
| | | | | 21 | | A1 | | 2007 | 0125 | | AU 2 | 006- | 2702 | 21 | | 2 | 0060 | 714 |
| | CA 2 | 26154 | 152 | | | A1 | | 2007 | 0125 | | CA 2 | 006- | 2615 | 452 | | 2 | 0060 | 714 |
| 1 | EP] | | | | | | | 2008 | | | | | | | | | | |
| | | R: | | | | | | CZ, | | | | | | | | | | |
| | | | | | | | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | AL, |
| | | | | HR, | | RS | | | | | | | | | | _ ^ | | |
| PRIOR | TTY | APPI | LN. | TNEO | . : | | | | | | US 2 | | | | | | 0050 | |
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| | | | | | | | | | | | US 2 | 006- | 7457 | 315 | | P 2 | 0060 | 426 |
| | | | | | | | | | | | US 2 | 006- | /45/ | 332 | | P Z | 0060 | 426 |
| IT : | | | | | | | | | | | WO 2 | 006- | 0527 | 321 | | W 2 | 0060 | /14 |
| | RL: | THU | (The | erap | euti | | e); | BIOL | | | | | | | | | . 1 . 1 | |
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L4 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

AB The invention relates to drug development and, more specifically, to designing compds. that modulate inosine monophosphate dehydrogenase (IMPDH). The invention provides a crystalline complex containing Tritrichomonas foetus IMPDH in complex with inosine monophosphate (IMP), the complex specified by disclosed atomic coordinates. Also provided are crystalline complexes of containing T. foetus IMPDH with both inosine monophosphate (IMP) and mycophenolic acid, with both xanthosine monophosphate (XMP) and mycophenolic acid, with both xanthosine monophosphate (XMP) and MAD, with ribavirin (1-B-D-ribofuranosyl-1,2,4-triazole-3-carboxamide), and with both ribavirin and mycophenolic acid, each complex specified by disclosed atomic coordinates. Also provided by the invention are the atomic coordinates for these complexes. Further provided by the invention are methods for identifying modulators of IMPDH that employ the atomic coordinates of the invention.

ACCESSION NUMBER: 2006:759515 CAPLUS

DOCUMENT NUMBER: 145:205118
TITLE: Crystal structure of Tritrichomonas foetus inosine

monophosphate dehydrogenase in complex with substrate,

cofactor and analogs, and drug design uses

INVENTOR(S): Luecke, Hartmut; Prosise, Glen

PATENT ASSIGNEE(S): Regents of the University of California, USA

SOURCE: U.S., 349 pp., which

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-------------------|----------|
| | | | | |
| US 7083961 | B1 | 20060801 | US 2003-663347 | 20030915 |
| PRIORITY APPLN. INFO.: | | | US 2002-410523P P | 20020913 |
| | | | US 2002-412044P P | 20020918 |

IT 24280-93-1DP, Mycophenolic acid, complexes with inosine monophosphate dehydrogenase and ribavirin monophosphate RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); USES (Uses) (crystal structure of Tritrichomonas foetus inosine monophosphate

(crystal structure of Tritrichomonas foetus inosine monophosphate dehydrogenase in complex with substrate, cofactor and analogs, and drug design uses)

RN 24280-93-1 CAPLUS

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

REFERENCE COUNT:

21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN ĠΙ

AB The use of a benzofuran to mask phenol and arylacetaldehyde moieties simultaneously in the synthesis of analogs of mycophenolic acid (MPA) was explored. Benzofuran I provided a stable and easily handled intermediate for the preparation of unnatural derivs. at the C-6 position of MPA.

III

Preparation of

the highly potent 6-Et MPA analog II was accomplished via aldehyde III through this facile route with high-yielding steps and crystalline intermediates.

ACCESSION NUMBER:

2006:530448 CAPLUS

DOCUMENT NUMBER: 145:210776

TITLE: Use of Benzofuran for Concomitant Protection of Aldehyde and Phenol Groups in the Preparation of

Mycophenolic Acid Analogues AUTHOR(S):

Fardis, Maria; Mertzman, Michael; Thomas, William; Kirschberg, Thorsten; Collins, Nicole; Polniaszek, Richard; Watkins, William J.

CORPORATE SOURCE: Gilead Sciences, Foster City, CA, 94404, USA

SOURCE: Journal of Organic Chemistry (2006), 71(13), 4835-4839 CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal. LANGUAGE: English

OTHER SOURCE(S): CASREACT 145:210776

IT 24280-93-1, Mycophenolic acid

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of mycophenolic acid analogs via use of benzofuran as protection of aldehyde and phenol groups)

24280-93-1 CAPLUS RN

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

Double bond geometry as shown.

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD, ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

AB Provided are crystalline mycophenolate sodium forms and processes for their preparation Claimed are crystalline mycophenolate sodium form M4, M5, M6, M7, M8, M9, M10, M11, and M12, mycophenolate sodium acetone

solvate, and mycophenolate sodium acetonitrile solvate. 2006:103455 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER: 144:177429

TITLE:

Crystalline mycophenolate sodium

INVENTOR(S): Molnar, Sandor; Szabo, Csaba; Tamas, Tivadar; Hajko, Janos; Kovacsne-Mezei, Adrienne; Aronhime, Judith

PATENT ASSIGNEE(S): Teva Gyogyszergyar Reszvenytarsasag, Hung.; Teva

Pharmaceuticals Usa, Inc.

PCT Int. Appl., 125 pp.

CODEN: PIXXD2

Patent

English

FAMILY ACC. NUM. COUNT: 2

DOCUMENT TYPE:

SOURCE:

LANGUAGE:

| PA: | ENT : | | | | KIN | D | DATE | | | APPL | | | | | D | ATE | |
|-----|-------|-----|-----|-----|----------|-----|------|-----|-----|------|-----|------|-----|-----|-----|------|-----|
| | 2006 | | 85 | | A2 A3 | | 2006 | | | WO 2 | | JS25 | | | 2 | 0050 | 720 |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | CN, | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM, | KP, | KR, | KZ, |
| | | LC, | LK, | LR, | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MZ, | NA, |
| | | NG, | NI, | NO, | NZ, | OM, | PG, | PH, | PL, | PT, | RO, | RU, | SC, | SD, | SE, | SG, | SK, |
| | | SL, | SM, | SY, | ΤJ, | TM, | TN, | TR, | TT, | TZ, | UA, | UG, | US, | UZ, | VC, | VN, | YU, |
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| | | IS, | IT, | LT, | LU, | LV, | MC, | NL, | PL, | PT, | RO, | SE, | SI, | SK, | TR, | BF, | BJ, |
| | | CF, | CG, | CI, | CM, | GA, | GN, | GQ, | GW, | ML, | MR, | NE, | SN, | TD, | TG, | BW, | GH, |
| | | GM. | KE. | LS. | MW. | MZ. | NA. | SD. | SL. | SZ. | TZ. | UG. | ZM. | ZW. | AM. | AZ. | BY. |

| KG, KZ, MD, RU, TJ, TM | 0.5 |
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| | 0.5 |
| CA 2573784 A1 20060202 CA 2005-2573784 2005072 | |
| US 20060069150 A1 20060330 US 2005-186164 2005072 | 0.5 |
| US 20060069152 A1 20060330 US 2005-186560 2005072 | 0 |
| EP 1768969 A2 20070404 EP 2005-773805 2005072 | 0.5 |
| CN 101052631 A 20071010 CN 2005-80023953 2005072 | 0.9 |
| JP 2008506784 T 20080306 JP 2007-522726 2005072 | 0.5 |
| EP 1908756 A1 20080409 EP 2007-23241 2005072 | 0.5 |
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| IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | |
| IN 2006DN07646 A 20070817 IN 2006-DN7646 2006121 | 8 |
| US 20080097096 A1 20080424 US 2007-2069 2007121 | 4 |
| US 20080103317 A1 20080501 US 2007-2049 2007121 | 4 |
| PRIORITY APPLN. INFO.: US 2004-589909P P 2004072 | |
| US 2004-631849P P 2004112 | |
| EP 2005-775059 A3 2005072 | |
| US 2005-186164 A3 2005072 | |
| WQ 2005-US25816 W 2005072 | |

- IT 23047-11-2P, Disodium mycophenolate 37415-62-6P, Mycophenolate sodium
 - RL: PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); PREP (Preparation)

(preparation of polymorphic forms of mycophenolate sodium and solvates thereof)

- RN 23047-11-2 CAPLUS
- CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, sodium salt (1:2), (4E)- (CA INDEX NAME)

Double bond geometry as shown.

●2 Na

- RN 37415-62-6 CAPLUS
- CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, sodium salt (1:1), (4E)- (CA INDEX NAME)

Na

24280-93-1, Mycophenolic acid ΙT RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of polymorphic forms of mycophenolate sodium and solvates thereof) 24280-93-1 CAPLUS

RN

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranvl)-4-methvl-, (4E)- (CA INDEX NAME)

Double bond geometry as shown.

874303-39-6 874303-40-9

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of polymorphic forms of mycophenolate sodium and solvates thereof)

RN 874303-39-6 CAPLUS

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, monosodium salt, (4E)-, compd. with 2-propanone (9CI) (CA INDEX NAME)

CM 1

CRN 24280-93-1

CMF C17 H20 O6

CM 2

CRN 67-64-1

CMF C3 H6 O

RN 874303-40-9 CAPLUS

4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5-isobenzofuranyl)-4-methyl-, (4E)-, monosodium salt, compd. with acetonitrile (9CI) (CA INDEX NAME)

CM 1

CRN 37415-62-6 CMF C17 H20 O6 . Na

Double bond geometry as shown.

● Na

CM 2

CRN 75-05-8 CMF C2 H3 N

 $H_3C-C=N$

L4 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

B Provided are crystalline mycophenolate sodium forms and processes for their preparation A process for preparing anhydrous crystalline mycophenolate sodium (Form M2) comprises (1) preparing a solution of mycophenolic acid in a Cl-4 alc., (2) combining a base and a source of sodium with the solution to obtain a reaction mixture, (3) crystallizing the mixture, and (4) recovering

the

PR.

crystalline form.

ACCESSION NUMBER: 2006:103454 CAPLUS

DOCUMENT NUMBER: 144:177428

TITLE: Processes for the preparation of crystalline

mycophenolate sodium

INVENTOR(S): Molnar, Sandor; Szabo, Csaba; Tamas, Tivadar; Hajko,
Janos; Kovacsne-Mezei, Adrienne; Aronhime, Judith

PATENT ASSIGNEE(S): Ceva Gyogyszergyar Reszvenytarsasag, Hung.; Teva Pharmaceuticals Usa, Inc.

SOURCE: PCT Int. Appl., 35 pp.

Patent

OURCE: PCT Int. Appl., 35 pp. CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| | ENT: | | | | | | DATE | | | | LICAT | | | | | ATE | |
|------|------|------|------|-----|-----|-----|------|------|-----|----|-------------------------|------|-----|-----|------|------|-----|
| WO | 2006 | 0123 | 79 | | A2 | | 2006 | 0202 | | | 2005- | | | | | | |
| WO | 2006 | | | | | | | | | | | | | | | | |
| | ₩: | | | | | | | | | | , BG, | | | | | | |
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| | | SL, | SM, | SY, | TJ, | TM, | TN, | TR, | TT, | TZ | , UA, | UG, | US, | UZ, | VC, | VN, | YU, |
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| | | KG, | | | RU, | | | | | | | | | | | | |
| CA | 2573 | 781 | | | A1 | | 2006 | 0202 | | CA | 2005- | 2573 | 781 | | 2 | 0050 | 720 |
| US | 2006 | 0069 | 150 | | A1 | | 2006 | 0330 | | US | 2005- | 1861 | 64 | | 2 | 0050 | 720 |
| US | 2006 | 0069 | 152 | | A1 | | 2006 | 0330 | | US | 2005- | 1865 | 60 | | 2 | 0050 | 720 |
| ΕP | 1699 | 773 | | | A2 | | 2006 | 0913 | | EΡ | 2005- | 7750 | 59 | | 2 | 0050 | 720 |
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| | | ΙE, | SI, | LT, | LV, | FI, | RO, | MK, | CY, | AL | , TR, | BG, | CZ, | EE, | HU, | PL, | SK, |
| | | BA, | HR, | | | | | | | | | | | | | | |
| | 1010 | | | | | | | | | | 2005- | | | | | | |
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| EP | | | | | | | | | | | 2007- | | | | | | |
| | R: | | | | | | | | | | , ES, | | | | | | ΙE, |
| | | | | | | | | | | | , PT, | | | | | | |
| US | 2008 | 0097 | 096 | | A1 | | 2008 | 0424 | | US | 2007- 2007- | 2069 | | | 2 | 0071 | 214 |
| US | 2008 | 0103 | 317 | | A1 | | 2008 | 0501 | | US | 2007- | 2049 | | | 2 | 0071 | 214 |
| RITY | APP | LN. | INFO | . : | | | | | | US | 2004- | 5899 | 09P | 1 | P 2 | 0040 | 720 |
| | | | | | | | | | | US | 2004- | 6318 | 49P | 1 | P 2 | 0041 | 129 |
| | | | | | | | | | | EP | 2004- 2004- 2005- | 7750 | 59 | | A3 2 | 0050 | 720 |
| | | | | | | | | | | US | 2005- | 1861 | 64 | - 1 | A3 2 | 0050 | 720 |
| | | | | | | | | | | WO | 2005- | US25 | 808 | 1 | N 2 | 0050 | 720 |

IT 37415-62-6P, Mycophenolate sodium
RL: PRP (Properties): SPN (Synthetic prepar

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of crystalline mycophenolate sodium)

RN 37415-62-6 CAPLUS

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, sodium salt (1:1), (4E)- (CA INDEX NAME)

Double bond geometry as shown.

Na

L4 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

AB In our studies on new plant growth regulators from fungal metabolites, we found the growth suppressive substances against lettuce seedling in an Et acetate extract of the culture broth of an unidentified species of Penicilliumn. A bioactive substance (1) was isolated as crystalline solid by column chromatog, and preparative TLC, successively. This substance (1) was identified to mycophenolic acid, 6-(4-hydroxy-6-methoxy-7-methyl-3-oxxo-5-phthalanyl)-4-methyl-4-hexenoic acid with UV, IR and MS. At a concentration of 100 ppm and 1000 ppm, the substance (1) inhibited the

lettuce root growth to 70% and 100% compared with the control, resp.

ACCESSION NUMBER: 2003:372844 CAPLUS

DOCUMENT NUMBER: 139:161860

TITLE: Plant growth regulator produced by Penicillium sp. (part 1)

AUTHOR(S): Adachi, Takuo; Katsuzaki, Hirotaka; Imai, Kunio;

Komiya, Takashi
CORPORATE SOURCE: Faculty of Agriculture, Meijo University, Japan

Meijo Daigaku Nogakubu Gakujutsu Hokoku (2003), 39, 21-26

CODEN: MDNGBZ: ISSN: 0910-3376

PUBLISHER: Meijo Daigaku Nogakubu
DOCUMENT TYPE: Journal

LANGUAGE: Japanese

IT 24280-93-1P, Mycophenolic acid RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); PUR (Purification or recovery); BIOL (Biological study); PREP

(Preparation)
(plant growth inhibitor produced by penicillium sp)

RN 24280-93-1 CAPLUS

SOURCE:

N 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

L4 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN GI

AB mycophenolic acid (I) [24280-93-1] is produced by culturing Penicillium strains 1st in a conventional nutrient medium and then in a 2nd medium containing sugar in the absence of a metabolizable N source. Thus, a preculture of P. brevicompactum OM-8406 was 1st aerobically incubated in a medium (pH 4.5) containing glucose, peptone, KH2PO4, and MgSO4.7H2O at 26° for 72 h with stirring (800 rpm) and aeration. The cultured cells were isolated and reincubated in a 2nd medium (pH 4.5) containing glucose 2% and adenine 0.03% under similar condition for 96 h. The accumulation of I reached 579 mL/L. I was extracted from the acidified broth with CHCl3 and dried to obtain crystalline I. Similar I production was achieved when glucose was replaced by sucrose or fructose as the C sucrose.

ACCESSION NUMBER: 1982:33356 CAPLUS
DOCUMENT NUMBER: 96:33356
ORIGINAL REFERENCE NO.: 96:5505a,5508a

TITLE: Production of mycophenolic acid

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

DOCUMENT TYPE: CODEN: JKXXAF
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 56127093 | A | 19811005 | JP 1980-29247 | 19800310 |
| PRIORITY APPLN. INFO.: | | | JP 1980-29247 A | 19800310 |

IT 24280-93-1P

RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)

(manufacture of, with Penicillium brevicompactum)

RN 24280-93-1 CAPLUS

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5-isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

Double bond geometry as shown.

L4 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN GI

AB A solution containing mycophenolic acid (I) [24280-93-1] is adjusted to pH <7 to crystalline I. Thus, 2 L of the fermented solution of Penicillium brevi-compactum containing 1 g I was maintained at 50° and the pH was adjusted to 3 with HCl. The solution was cooled gradually to 5° to precipitate 1.05 g crude crystals containing 0.97 g I.

ACCESSION NUMBER: 1980:443954 CAPLUS DOCUMENT NUMBER: 93:43954

ORIGINAL REFERENCE NO.: 93:7277a,7280a

TITLE: Separation of mycophenolic acid

INVENTOR(S): Uchida, Hiroshi; Igarashi, Mieko; Kusumoto, Isao PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan

PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

DOCUMENT TYPE: CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|------------------------|------|----------|-----------------|---|----------|
| | | | | | |
| JP 55019055 | A | 19800209 | JP 1978-91987 | | 19780727 |
| PRIORITY APPLN. INFO.: | | | JP 1978-91987 | Α | 19780727 |
| | | | | | |

T 24280-93-1 RL: PROC (Process)

(crystallization of, from Penicillium brevi-compactum fermentation medium) 24280-93-1 CAPLUS

CN 4-Hexenoic acid, 6-(1,3-dihydro-4-hydroxy-6-methoxy-7-methyl-3-oxo-5isobenzofuranyl)-4-methyl-, (4E)- (CA INDEX NAME)

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690670 "CRYSTALS"
1692513 "CRYSTAL"
("CRYSTAL"
("CRYSTAL"
8408 "HABIT"
8408 "HABITS"
25071 "HABIT"
("HABIT" OR "HABITS")
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("CRYSTAL HABIT"
("CRYSTAL"(W)"HABIT")
9394 ACICULAR
7 ACICULARS
9398 ACICULAR
((ACICULAR OR ACICULARS)
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=> d 111 1-2 abs ibib
L11 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
    The crystal growth rate is mainly determined by diffusion in the vapor phase.
     The limitation of the growth process by transport leads to a continuous
     change of the growth conditions, which is the cause of slowing down the
     growth and the change of the growth rates ratio of the crystallog.
     different faces, the latter evokes refaceting. The limitation of the
     growth by the transport process is the factor reducing the perfection of
     the structure and the maximum sizes of single crystals.
ACCESSION NUMBER:
                         1985:176745 CAPLUS
DOCUMENT NUMBER:
                         102:176745
ORIGINAL REFERENCE NO.: 102:27645a,27648a
TITLE:
                         Stability of growth conditions and a-mercury(II)
                         iodide crystal habit during
                         growing by temperature oscillation
                         method
AUTHOR(S):
                         Zaletin, V. M.; Lyakh, N. V.; Ragozina, N. V.
CORPORATE SOURCE:
                         Inst. Semicond. Phys., Novosibirsk, 630090, USSR
SOURCE:
                         Crystal Research and Technology (1985), 20(3), 307-12
                         CODEN: CRTEDF: ISSN: 0232-1300
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
L11 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2008 ACS on STN
    cf. C.A. 46, 9923f. Crystals of NaCl were immersed in saturated solution in
     closed vessels containing excess NaCl in the bottom. The temperature was
oscillated
     over ranges of 0.1, 2, and 5° around 20° in various expts.
     The period of the temperature oscillation was 20 min. The
     vessels were either provided with Hq-sealed stirrers or else were held in
    a mech. shaker. The expts. lasted about 3 days for \Delta T=5^{\circ}, about 2 weeks for \Delta T=0.1^{\circ}. At the end of the expts.,
     crystals originally cubes (001) exhibited faces 001, 111, 012, (011?).
    Crystals originally octahedra (111) (from solns. containing urea) exhibited
    faces 111, 001, 012, 011. Crystals originally dodecahedra (011) (from
     solns. containing glycine) exhibited faces 011, 001, 111, (012?). Faces 011
     and 012 were striated parallel to cube edges. The nature of the new faces
    was independent of AT and of the original shape. No limiting
    end-form could be recognized. It was concluded that the faces listed are
    among those which grow by repeatable steps.
```

L11

ACCESSION NUMBER: 1952:64699 CAPLUS

DOCUMENT NUMBER: 46:64699
ORIGINAL REFERENCE NO.: 46:10771f-h

TITLE: Modification of the habit of sodium chloride crystals

in saturated solution under the influence of

temperature oscillations

AUTHOR(S): Honigmann, B.

CORPORATE SOURCE: Kaiser-Wilhelm Inst., Berlin-Dahlem

SOURCE: Zeitschrift fuer Elektrochemie und Angewandte

Physikalische Chemie (1952), 56, 342-5

CODEN: ZEAPAA; ISSN: 0372-8323

DOCUMENT TYPE: Journal

LANGUAGE: Unavailable

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